

Response
Application No. 10/763,423
Attorney Docket No. 042046

REMARKS

Claims 1-20 are pending in the application. By this Amendment, claims 1 and 12 have been amended. It is submitted that this Amendment is fully responsive to the Office Action dated June 6, 2007.

Specification

The abstract is objected to as including word "etc."

This objection is traversed. It is respectfully submitted that such errors have been corrected by the present Amendment.

Claim Rejections - 35 U.S.C. §112

Claims 1-20 are rejected under 35 U.S.C. §112, second paragraph as being indefinite.

This rejection is traversed. It is respectfully submitted that such indefiniteness have been corrected by the present Amendment:

Claim Rejections - 35 U.S.C. §102

Claims 1-5, 7-10 and 15 are rejected under 35 U.S.C. §102(b) as being anticipated by Sharman (USP 5,686,210).

This rejection is traversed.

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Claim 1, as amended, now recites (a) “a comparison-determination unit comparing the recorded image with captured image data of the object and determining whether or not the recorded image and the captured image data match each other” and (b) “the camera captures the image data of the object placed above the camera and the illumination.”

This Amendment is supported by Fig. 3.

It is submitted that the disclosure of Sharman is completely silent regarding the above claimed feature.

Claim feature (a)

First, the Examiner’s ground of anticipation of the feature (a) is based on the description of column 4, lines 20-24; column 7, lines 3-10; column 5, lines 31-38; and column 2, lines 17-18 (page 5, item A, lines 12-14 of the Action). However, these parts of Sharman do not disclose the feature (a) as discussed below.

It is submitted that the above parts of the descriptions of Sharman merely disclose that **a calculated dye absorbency curve is compared to a film data** to determine the type of the film and thus Sharman is silent regarding comparison of the recorded image with captured image data of the object.

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Specifically, the objective of Sharman is to distinguish the type of photographic material between Kodachrome and Ektachrome (column 2, lines 3-6). To achieve this, Sharman uses dye absorbency curves since the dye used in transparency materials vary in the shapes of their absorbency curves (column 3, lines 22-25). Specifically, Sharman focuses on the difference of the slope of cyan dye curve between Kodachrome and Ektachrome.

In other words, by comparing the measured slope of the cyan dye curve with the slope data of Kodachrome and Ektachrome, the type of the film is determined (column 3, lines 36-40).

Furthermore, to calculate the slope of the cyan dye, Sharman uses five visible wavelength, namely, 555nm, 585nm, 605nm, 630nm and 660nm (column 3, lines 41-48). As shown in Fig. 1, by calculating the ratio of the densities at the adjacent wavelengths such as 555nm and 585nm, the slope is calculated.

To measure the density at each wavelength, the illumination source 10 includes five LEDs 12, each provides illumination at wavelength of 555nm, 585nm, 605nm, 630nm or 660nm. In this configuration, each LED illuminates the transparency film in turn and a photodiode 18 receives light passing through the transparency film (column 3, lines 49-67).

Therefore, Sharman is solely directed to **the comparison of the cyan die absorbency curves.**

On the contrary, in the present claimed invention, **the recorded image is compared with captured image data of the object.**

The present claimed invention and that of Sharman are different from each other in the methods of determining the object to be authentic or counterfeit. In the present claimed invention, a recorded image and a captured image are compared with each other, whereas in Sharman, density curves of the spectrum of the respective colors are used.

In other words, in the present claimed invention, matching is performed on the two images in order to determine the material, whereas in the invention of Sharman, the material is determined just on the basis of the spectrum. Furthermore, in order to perform the matching of the images and the determination of material efficiently, the configurations as in claims 7 and 9 are employed in the present application.

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Accordingly, Sharman is completely different from the feature (a) “a comparison-determination unit **comparing the recorded image with captured image data of the object** and determining whether or not the recorded image and the captured image data match each other” since Sharman is solely directed to the comparison of the cyan die absorbency curves.

Therefore, it is submitted that Sharman is completely silent and different from the claimed feature (a) “a comparison-determination unit comparing the recorded image with captured image data of the object and determining whether or not the recorded image and the captured image data match each other.”

Claim feature (b)

Next, the Examiner’s ground of anticipation of the feature (b) is based on the description of column 8, lines 45-50 and column 13, lines 24-35 (page 5, item A, line 18 of the Action). However, these parts of Sharman do not disclose the feature (b) as discussed below.

The claimed feature (b) recites “the camera captures the image data of the object **placed above the camera and the illumination.**”

First, the disclosures of Sharman relied by the Examiner are completely silent and different from the claimed feature (b).

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Specifically, the description of column 8, lines 45-50 is solely directed to a method for finding incorrect insertion of the transparency film by measuring the density at 935nm. Also, the description of column 13, lines 24-35 is solely directed to a method for determining the type of film by comparing the slope of the cyan die curve.

Therefore, it is submitted that these parts of Sharman are completely unrelated to the claimed feature (b).

Second, Fig. 3 of Sharman discloses the configuration of the apparatus. Importantly, the transparency film T is located **between an illumination source 10 and a photodiode 18**.

Therefore, it is submitted that Sharman is completely silent regarding the feature (b) “the camera captures the image data of the object **placed above the camera and the illumination**.”

In addition, the feature (b) is of a great importance in view of the practical usage. The configuration as shown in Fig. 5 of the document of Sharman may facilitate the determination itself. However, this configuration is not user-friendly. This is why the present claimed invention employs the configuration of holding the object up above the camera.

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As a result of this, the present claimed invention as in claims 4 and 6 includes the brightness correction unit and the distance sensor. The necessity of these devices arises from the configuration of holding the object up above the camera.

In view of the above, it is submitted that Sharman does not disclose or fairly suggest the claimed feature of (a) “a comparison-determination unit comparing the recorded image with captured image data of the object and determining whether or not the recorded image and the captured image data match each other” and (b) “the camera captures the image data of the object placed above the camera and the illumination,” as called for in amended claim 1.

Accordingly, claim 1 is not anticipated by Sharman.

Claims 2-5, 7-10 and 15 are directly or indirectly dependent from claim 1 and recites the additional features set forth therein. Accordingly claims 2-5, 7-10 and 15 are not anticipated by Sharman for at least the reasons set forth above.

Claim Rejections - 35 U.S.C. §103

Claim 11 is rejected under 35 U.S.C. §103(a) as being unpatentable over Sharman (USP 5,686,210).

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This rejection is traversed. Claim 11 is dependent from claim 1 and recites the additional features set forth therein. Accordingly, claim 11 is not obvious over Sharman for at least the reasons set forth above.

Claims 6, 13 and 14 are rejected under 35 U.S.C. §103(a) as being unpatentable over Sharman (USP 5,686,210) in view of Ishiguro (USP 6,029,015).

This rejection is traversed. Claims 6, 13 and 14 are directly or indirectly dependent from claim 1 and recites the additional features set forth therein. Accordingly, claims 6, 13 and 14 are not obvious over Sharman in view of Ishiguro for at least the reasons set forth above.

Claim 12 is rejected under 35 U.S.C. §103(a) as being unpatentable over Sharman (USP 5,686,210) in view of Fujioka (USP 5,751,446).

This rejection is traversed. Claim 12 is dependent from claim 1 and recites the additional features set forth therein. Accordingly, claim 12 is not obvious over Sharman in view of Fujioka for at least the reasons set forth above.

Claims 16-19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Sharman (USP 5,686,210) in view of Bulman et al. (US 2003/0051255).

This rejection is traversed. Claims 16-19 are directly or indirectly dependent from claim 1 and recites the additional features set forth therein. Accordingly, claims 16-19 are not obvious over Sharman in view of Bulman et al. for at least the reasons set forth above.

Claim 20 is rejected under 35 U.S.C. §103(a) as being unpatentable over Sharman (USP 5,686,210) in view of Enright et al. (USP 6,583,813).

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This rejection is traversed. Claim 20 is dependent from claim 1 and recites the additional features set forth therein. Accordingly, claim 20 is not obvious over Sharman in view of Enright et al. for at least the reasons set forth above.

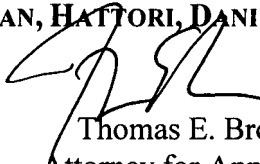
In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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